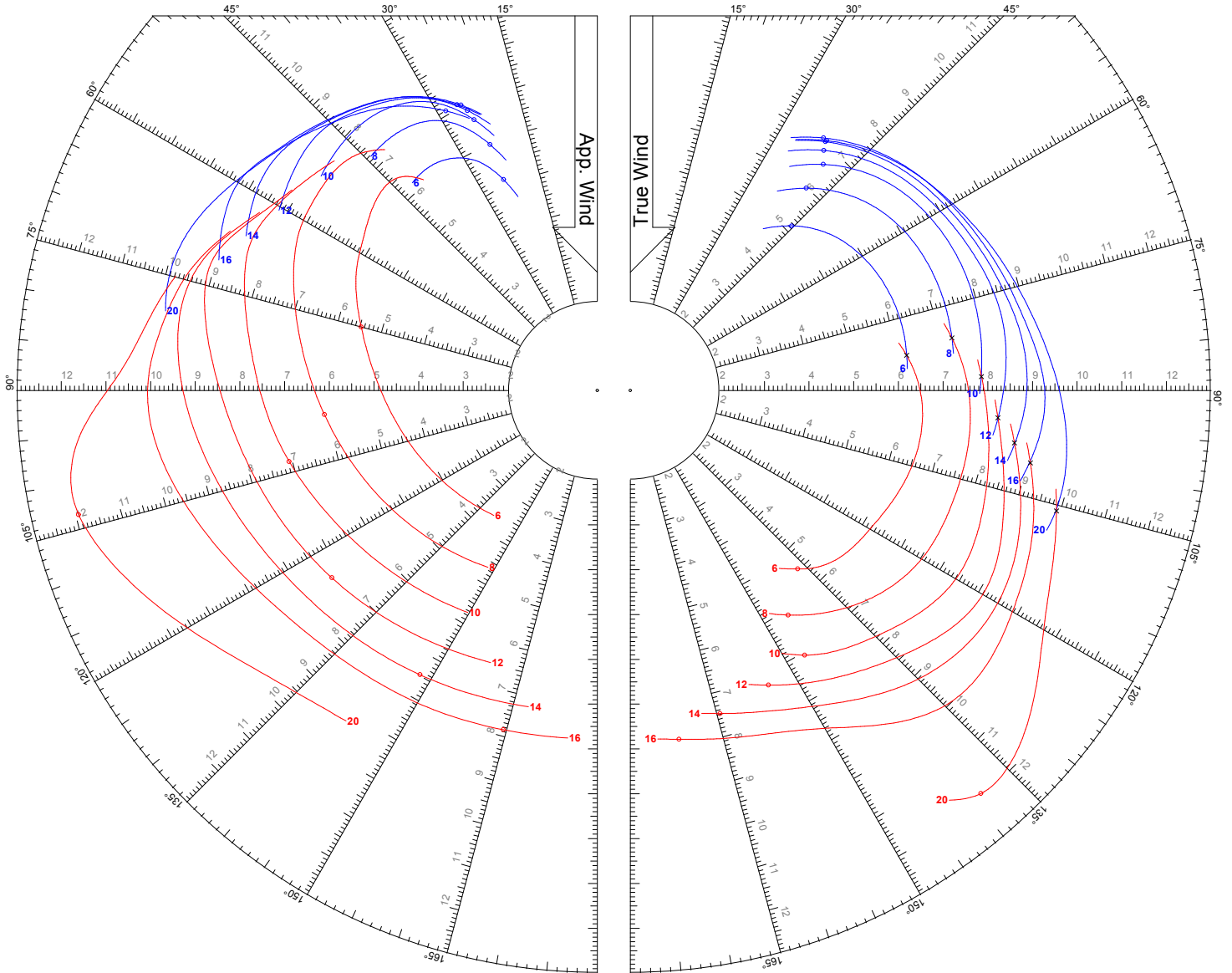




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# Speed Guide



## Polar Plot for Boat

Name **J/111**  
Sail Number **Class Sails**  
Class **J/111 One Design**  
Designer **R. Alan Johnstone**  
Builder **J Boats, Inc.**  
Issued On **2/21/2011 - VPP 2011 1.01**

TWS: 6, 8, 10, 12, 14, 16, 20 kts

**Jib**

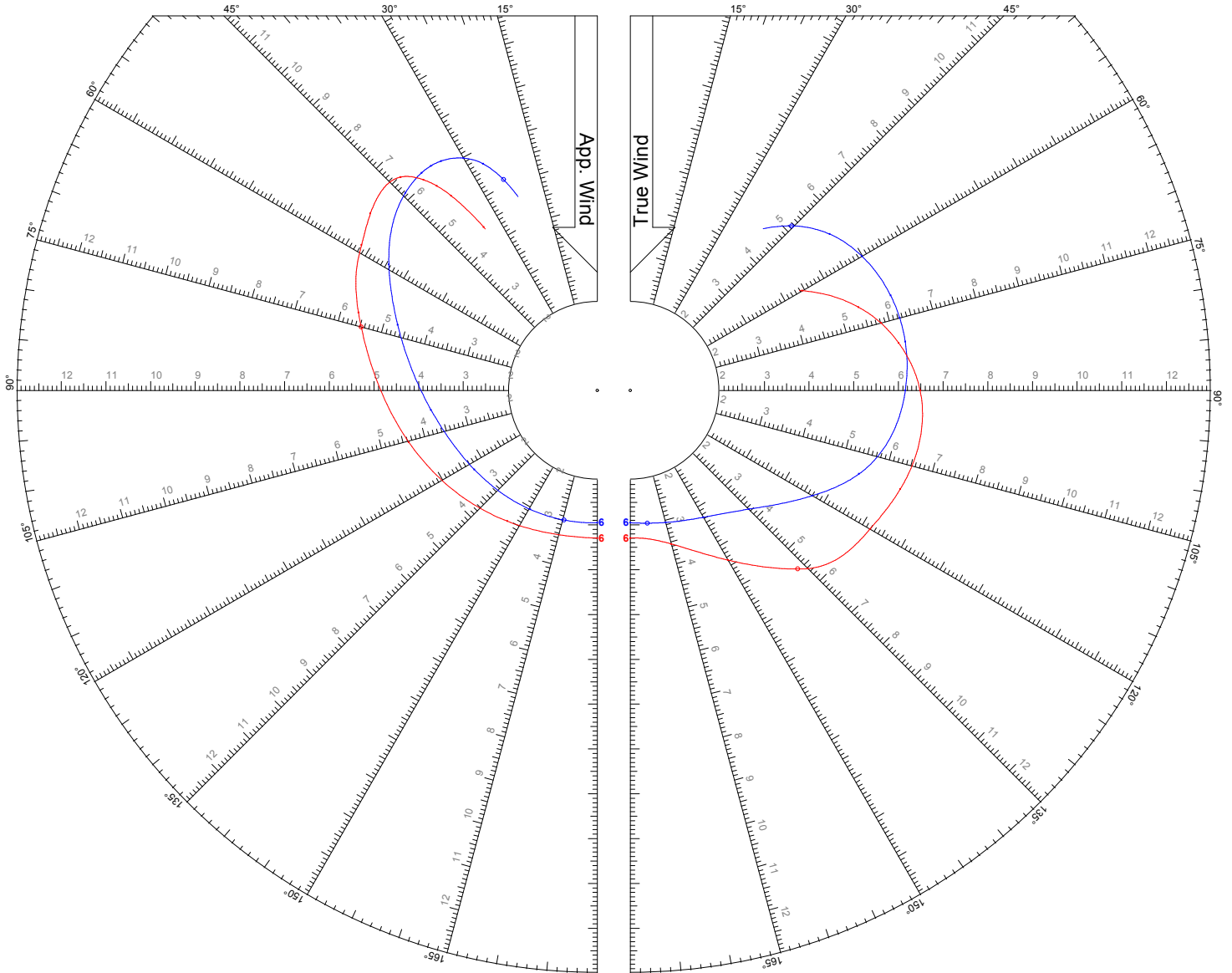
**Asymmetric Spinnaker on Centerline**



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## Polar Plot for Boat

Name **J/111**  
Sail Number **Class Sails**  
Class **J/111 One Design**  
Designer **R. Alan Johnstone**  
Builder **J Boats, Inc.**  
Issued On **2/21/2011 - VPP 2011 1.01**

**TWS: 6 kts**

**Jib**

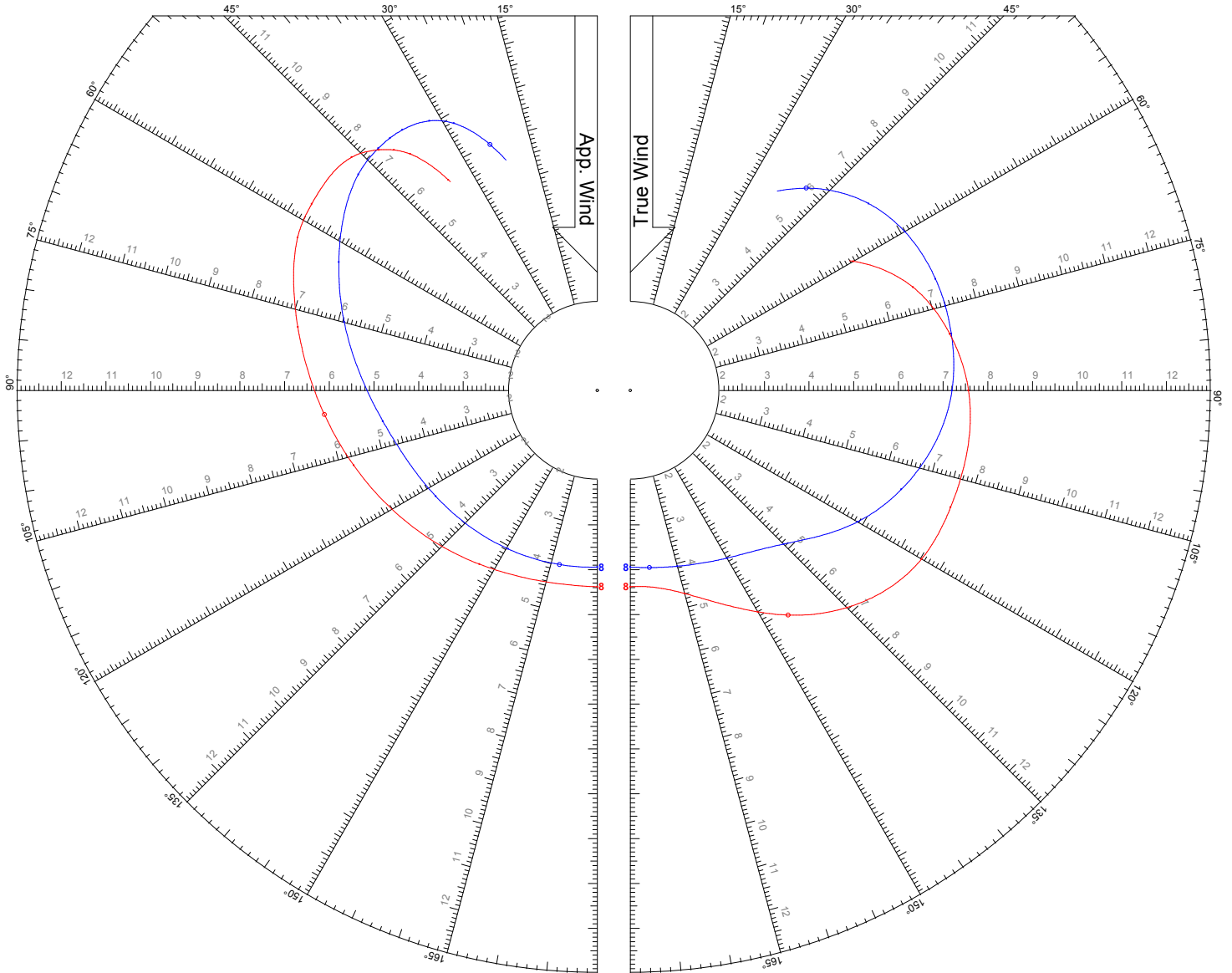
**Asymmetric Spinnaker on Centerline**



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Polar Plot for Boat	
Name	J/111
Sail Number	Class Sails
Class	J/111 One Design
Designer	R. Alan Johnstone
Builder	J Boats, Inc.
Issued On	2/21/2011 - VPP 2011 1.01

TWS: 8 kts

Jib

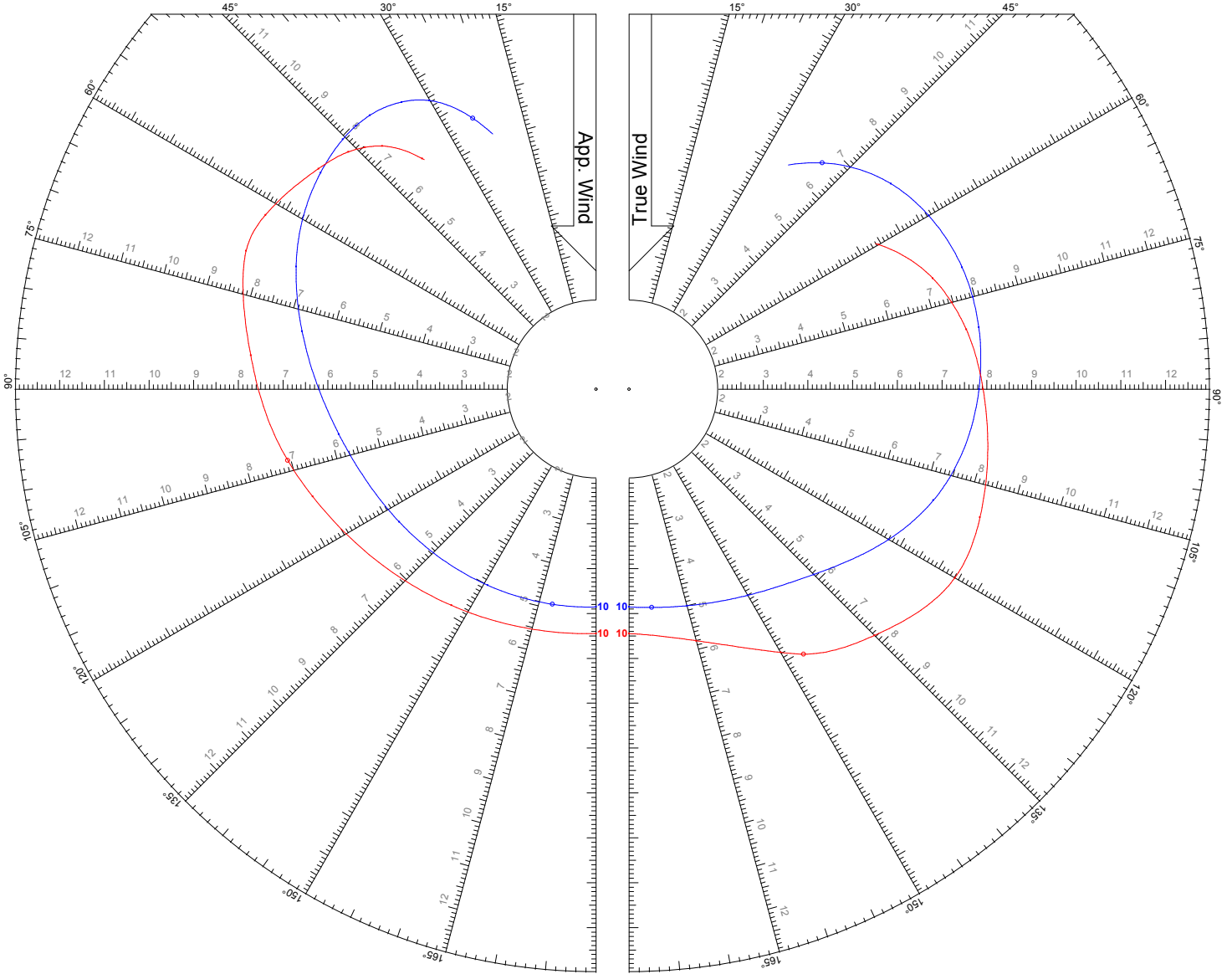
Asymmetric Spinnaker on Centerline



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### Polar Plot for Boat

Name **J/111**  
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 Designer **R. Alan Johnstone**  
 Builder **J Boats, Inc.**  
 Issued On **2/21/2011 - VPP 2011 1.01**

**TWS: 10 kts**

**Jib**

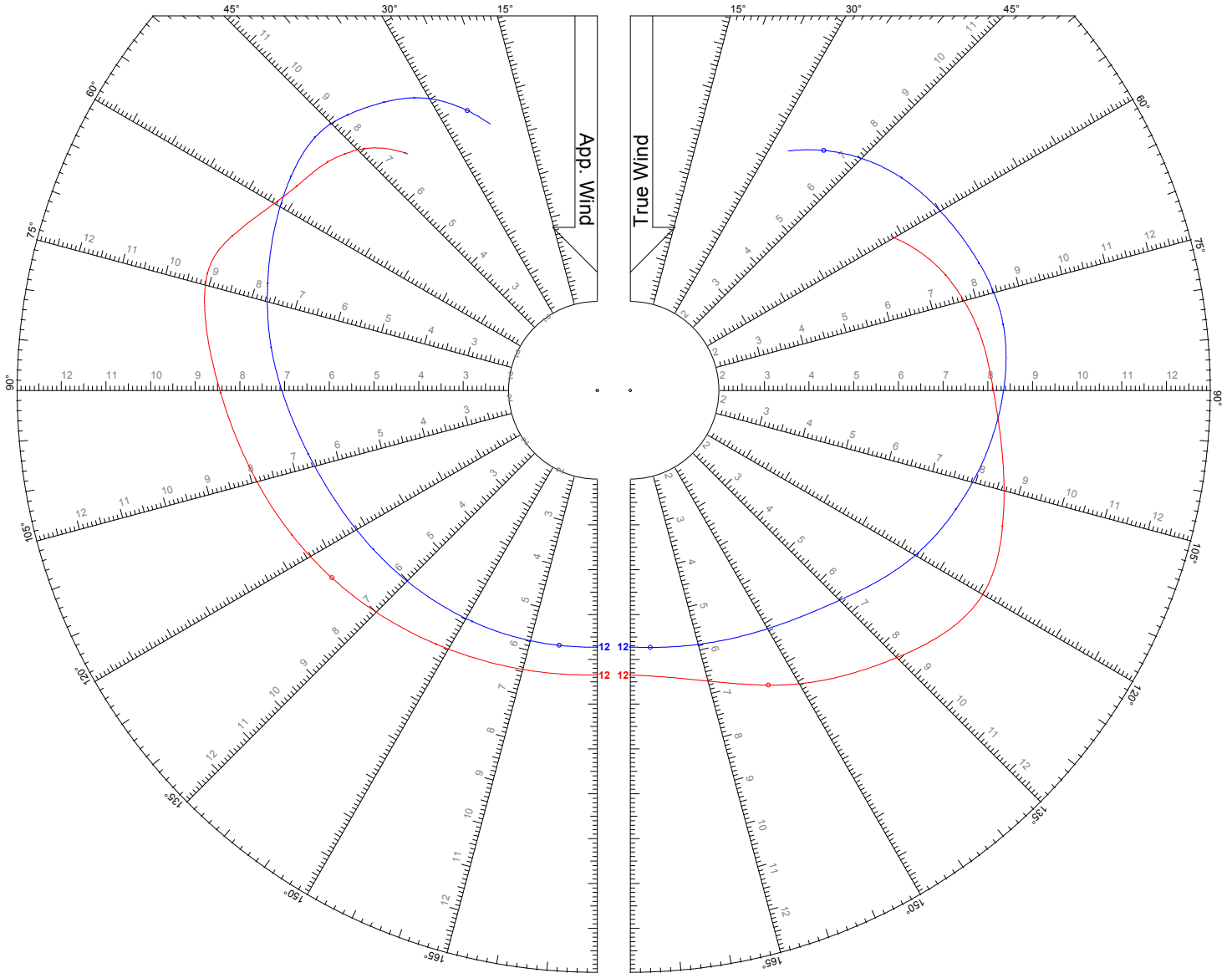
**Asymmetric Spinnaker on Centerline**



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Polar Plot for Boat	
Name	J/111
Sail Number	Class Sails
Class	J/111 One Design
Designer	R. Alan Johnstone
Builder	J Boats, Inc.
Issued On	2/21/2011 - VPP 2011 1.01

TWS: 12 kts

Jib

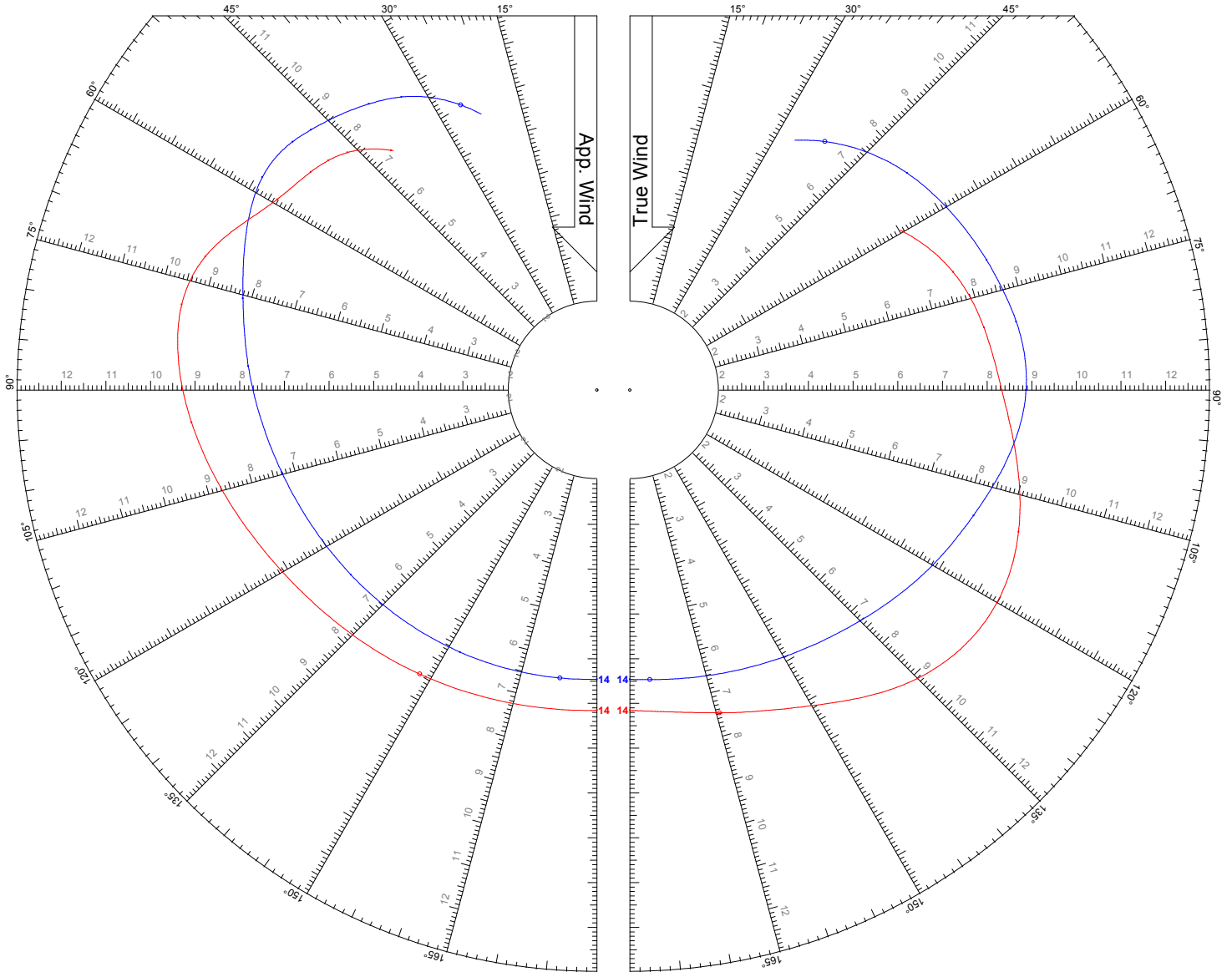
Asymmetric Spinnaker on Centerline



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### Polar Plot for Boat

Name **J/111**  
 Sail Number **Class Sails**  
 Class **J/111 One Design**  
 Designer **R. Alan Johnstone**  
 Builder **J Boats, Inc.**  
 Issued On **2/21/2011 - VPP 2011 1.01**

**TWS: 14 kts**

**Jib**

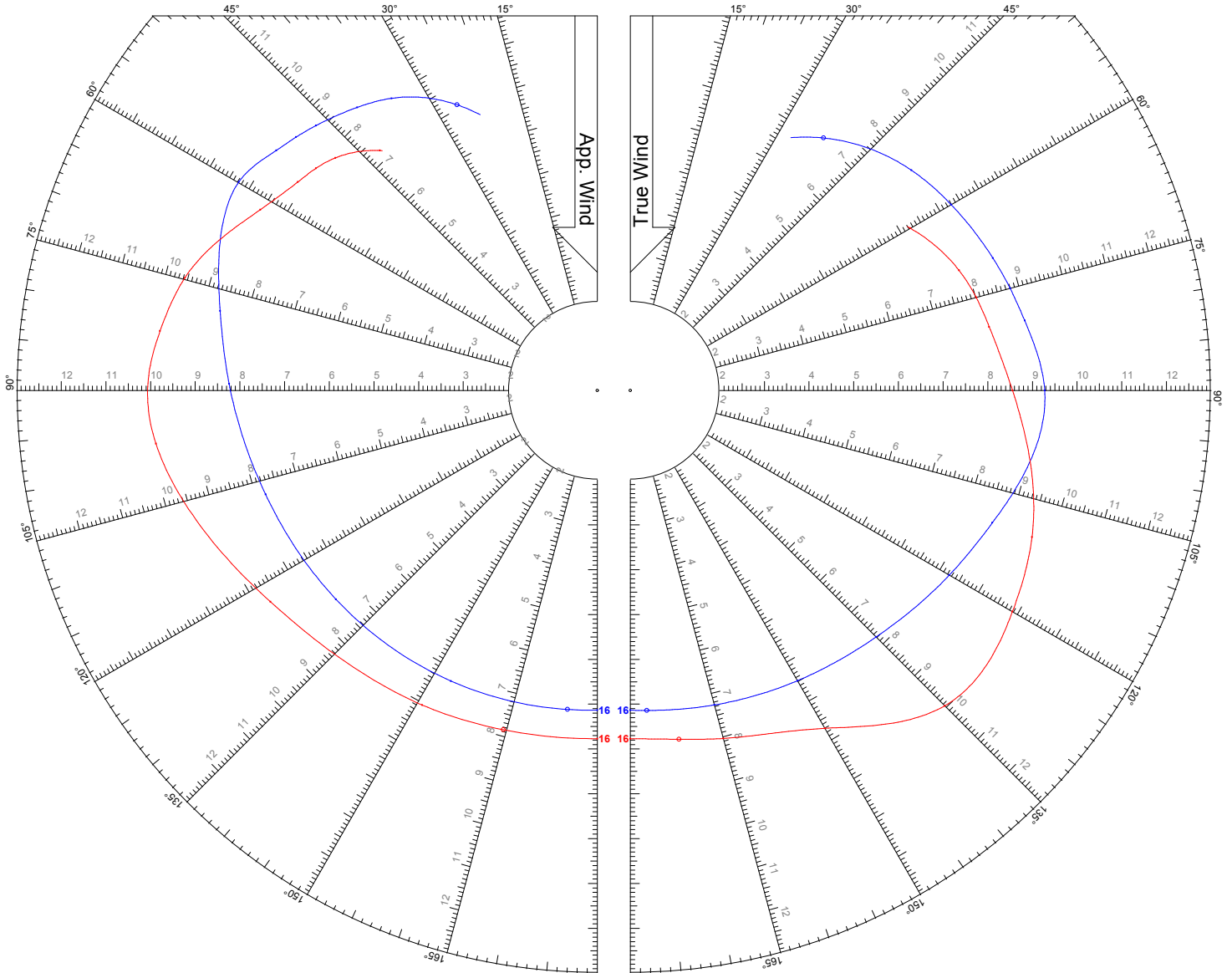
**Asymmetric Spinnaker on Centerline**



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Polar Plot for Boat	
Name	J/111
Sail Number	Class Sails
Class	J/111 One Design
Designer	R. Alan Johnstone
Builder	J Boats, Inc.
Issued On	2/21/2011 - VPP 2011 1.01

TWS: 16 kts

Jib

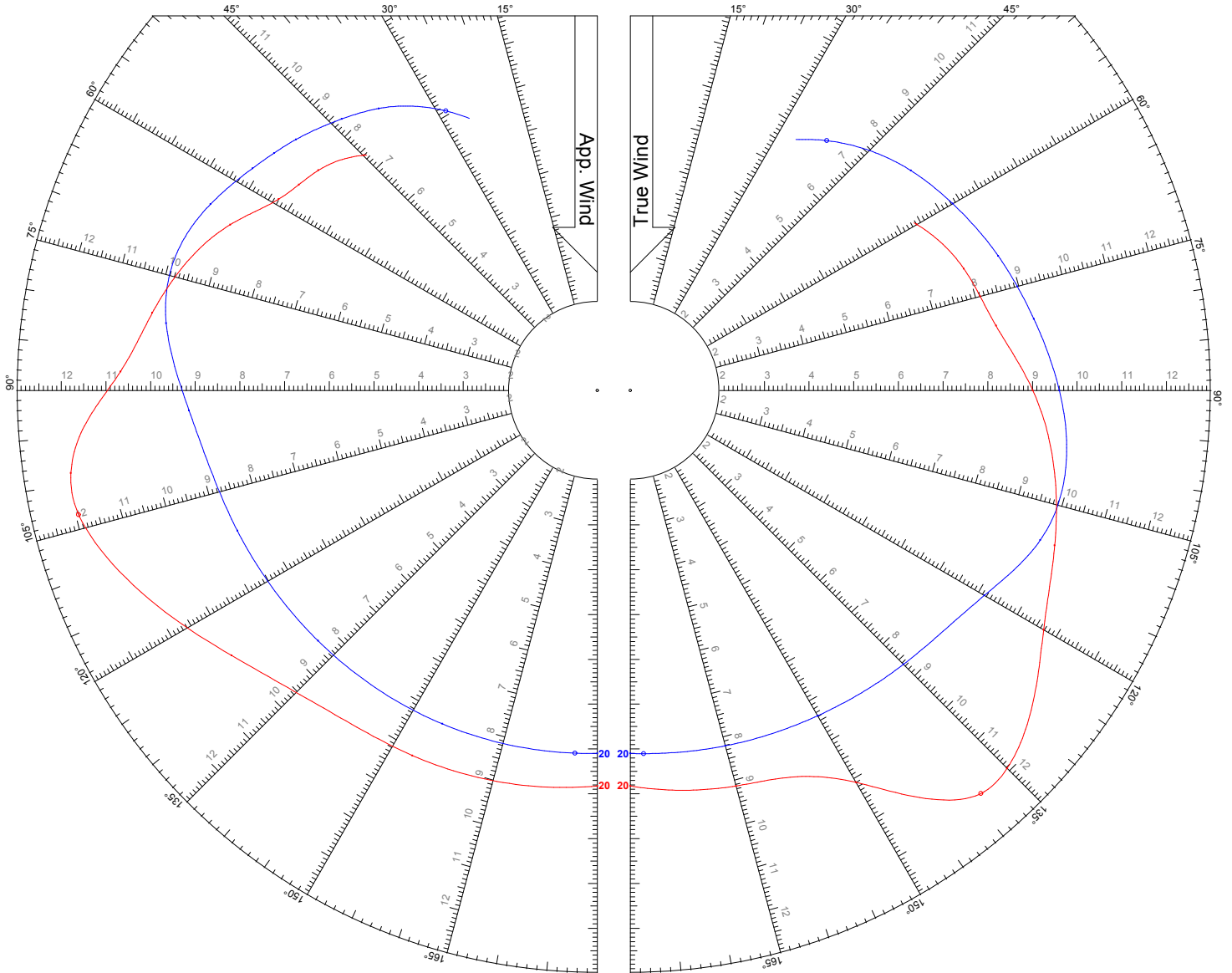
Asymmetric Spinnaker on Centerline



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## Polar Plot for Boat

Name **J/111**  
Sail Number **Class Sails**  
Class **J/111 One Design**  
Designer **R. Alan Johnstone**  
Builder **J Boats, Inc.**  
Issued On **2/21/2011 - VPP 2011 1.01**

**TWS: 20 kts**

**Jib**

**Asymmetric Spinnaker on Centerline**





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**Polar Tables**

Boat Name: **J/111**

Sail No: **Class Sails**

Sail: **Best Performance**

Issued On: **2/21/2011 - VPP 2011 1.01**

**TWS = 6 Kts**

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
44.5° (b)	5.15	3.67	10.32	24.1°	4.7°	1.00	1.00
52°	5.66	3.49	10.48	26.8°	4.9°	1.00	1.00
60°	5.99	2.99	10.38	30.0°	4.7°	1.00	1.00
70°	6.20	2.12	9.99	34.3°	4.3°	1.00	1.00
75°	6.24	1.62	9.71	36.6°	4.0°	1.00	1.00
80°	6.25	1.09	9.38	39.0°	3.7°	1.00	1.00
90°	6.49	0.00	8.84	42.8°	16.1°	1.00	1.00
110°	6.43	2.20	7.14	52.2°	14.6°	1.00	1.00
120°	6.19	3.10	6.10	58.4°	13.0°	1.00	1.00
135°	5.62	3.98	4.46	72.0°	11.6°	1.00	1.00
150°	4.37	3.79	3.11	105.4°	10.7°	1.00	1.00
165°	3.55	3.43	2.73	145.4°	10.2°	1.00	1.00
180°	3.29	3.29	2.71	180.0°	9.9°	1.00	1.00
136.8° (r)	5.47	3.98	4.26	75.0°	11.5°	1.00	1.00

**TWS = 8 Kts**

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.1° (b)	5.99	4.51	13.12	23.6°	12.8°	1.00	1.00
52°	6.77	4.17	13.29	28.3°	13.3°	1.00	1.00
60°	7.09	3.54	13.08	32.0°	12.1°	1.00	1.00
70°	7.27	2.49	12.51	36.9°	9.5°	1.00	1.00
75°	7.30	1.89	12.14	39.5°	8.0°	1.00	1.00
80°	7.29	1.27	11.73	42.2°	6.3°	1.00	1.00
90°	7.57	0.00	11.01	46.6°	26.6°	1.00	0.96
110°	7.63	2.61	8.97	56.9°	17.1°	1.00	1.00
120°	7.53	3.76	7.77	63.0°	15.6°	1.00	1.00
135°	6.85	4.85	5.78	78.1°	12.3°	1.00	1.00
150°	5.70	4.94	4.18	107.0°	11.0°	1.00	1.00
165°	4.69	4.53	3.68	145.7°	10.4°	1.00	1.00
180°	4.38	4.38	3.62	180.0°	10.0°	1.00	1.00
144.8° (r)	6.13	5.01	4.63	95.0°	11.4°	1.00	1.00

**TWS = 10 Kts**

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
40.6° (b)	6.64	5.04	15.65	24.6°	21.8°	1.00	0.93
52°	7.43	4.58	15.71	30.1°	24.8°	1.00	0.99
60°	7.74	3.87	15.40	34.2°	22.9°	1.00	1.00
70°	7.93	2.71	14.73	39.6°	18.1°	1.00	1.00
75°	7.95	2.06	14.30	42.5°	15.5°	1.00	1.00
80°	7.94	1.38	13.81	45.5°	12.8°	1.00	1.00
90°	7.92	0.00	12.75	51.6°	26.7°	0.93	0.85
110°	8.35	2.86	10.61	62.3°	26.6°	1.00	0.94
120°	8.41	4.21	9.31	68.5°	17.0°	1.00	1.00
135°	7.76	5.49	7.10	84.4°	13.2°	1.00	1.00
150°	6.78	5.87	5.34	110.7°	11.3°	1.00	1.00
165°	5.80	5.61	4.64	146.1°	10.5°	1.00	1.00
180°	5.45	5.45	4.55	180.0°	10.1°	1.00	1.00
146.6° (r)	7.08	5.91	5.65	103.0°	11.6°	1.00	1.00

**TWS = 12 Kts**

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
39.0° (b)	6.89	5.35	17.89	25.0°	23.6°	1.00	0.77
52°	7.70	4.74	17.81	32.1°	26.5°	1.00	0.83
60°	8.01	4.00	17.44	36.6°	27.1°	1.00	0.88
70°	8.31	2.84	16.77	42.3°	27.7°	1.00	0.98
75°	8.43	2.18	16.35	45.1°	25.1°	1.00	1.00
80°	8.47	1.47	15.85	48.2°	21.0°	1.00	1.00
90°	8.35	0.00	14.62	55.2°	12.7°	1.00	1.00
110°	8.86	3.03	12.24	67.1°	26.7°	0.96	0.86
120°	9.11	4.55	10.85	73.4°	24.7°	1.00	1.00
135°	8.43	5.96	8.49	90.4°	14.8°	1.00	1.00
150°	7.56	6.54	6.64	115.3°	11.7°	1.00	1.00
165°	6.71	6.48	5.78	147.5°	10.7°	1.00	1.00
180°	6.35	6.35	5.65	180.0°	10.2°	1.00	1.00
154.8° (r)	7.27	6.57	6.25	125.1°	11.3°	1.00	1.00

**TWS = 14 Kts**

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
38.2° (b)	7.06	5.55	20.03	25.6°	25.4°	1.00	0.66
52°	7.87	4.85	19.84	33.8°	27.3°	1.00	0.71
60°	8.18	4.09	19.43	38.6°	28.0°	1.00	0.76
70°	8.50	2.91	18.70	44.7°	28.5°	1.00	0.84
75°	8.65	2.24	18.26	47.8°	28.6°	1.00	0.90
80°	8.79	1.53	17.77	50.9°	28.7°	1.00	0.97
90°	8.87	0.00	16.58	57.6°	19.5°	1.00	1.00
110°	9.26	3.17	13.90	71.2°	26.7°	0.85	0.99
120°	9.49	4.75	12.38	78.4°	26.7°	0.94	1.00
135°	9.11	6.44	9.93	94.6°	15.8°	1.00	1.00
150°	8.14	7.05	8.05	119.6°	12.0°	1.00	1.00
165°	7.46	7.21	7.06	149.1°	10.9°	1.00	1.00
180°	7.15	7.15	6.85	180.0°	10.3°	1.00	1.00
164.4° (r)	7.48	7.21	7.08	148.0°	11.0°	1.00	1.00

**TWS = 16 Kts**

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
37.5° (b)	7.10	5.63	22.06	26.2°	27.9°	0.91	0.60
52°	7.98	4.91	21.84	35.3°	28.1°	1.00	0.61
60°	8.29	4.15	21.39	40.4°	28.7°	1.00	0.65
70°	8.63	2.95	20.62	46.8°	29.1°	1.00	0.73
75°	8.80	2.28	20.16	50.1°	29.3°	1.00	0.78
80°	8.96	1.56	19.65	53.3°	29.3°	1.00	0.85
90°	9.27	0.00	18.49	59.9°	27.9°	1.00	1.00
110°	9.57	3.27	15.58	74.8°	26.7°	0.79	1.00
120°	9.88	4.94	13.98	82.3°	26.7°	0.88	1.00
135°	9.95	7.04	11.40	96.9°	16.8°	1.00	1.00
150°	8.70	7.54	9.52	122.8°	12.4°	1.00	1.00
165°	8.04	7.77	8.49	150.8°	11.1°	1.00	1.00
180°	7.77	7.77	8.23	180.0°	10.4°	1.00	1.00
172.0° (r)	7.86	7.78	8.29	164.5°	10.8°	1.00	1.00

**TWS = 20 Kts**

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
38.3° (b)	7.10	5.57	25.95	28.5°	26.7°	0.46	0.60
52°	7.97	4.90	25.68	37.9°	28.6°	0.49	0.60
60°	8.33	4.17	25.22	43.4°	30.9°	0.62	0.60
70°	8.76	3.00	24.43	50.3°	30.3°	0.87	0.60
75°	8.97	2.32	23.94	53.8°	30.3°	1.00	0.61
80°	9.17	1.59	23.41	57.3°	30.4°	1.00	0.66
90°	9.60	0.00	22.19	64.4°	30.3°	1.00	0.81
110°	10.11	3.46	19.08	80.1°	26.7°	0.70	1.00
120°	10.68	5.34	17.33	87.7°	26.7°	0.78	1.00
135°	11.93	8.43	14.31	98.9°	26.7°	0.97	1.00
150°	10.10	8.75	12.34	125.8°	14.1°	1.00	1.00
165°	9.14	8.83	11.42	153.1°	11.6°	1.00	1.00
180°	8.82	8.82	11.18	180.0°	10.6°	1.00	1.00
138.9° (r)	11.94	8.99	13.52	103.4°	21.0°	1.00	1.00



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**Polar Tables**

Boat Name: **J/111**

Sail No: **Class Sails**

Sail: **Jib**

Issued On: **2/21/2011 - VPP 2011 1.01**

TWS = 6 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
44.5° (b)	5.15	3.67	10.12	23.6°	4.7°	1.00	1.00
52°	5.66	3.49	10.29	26.2°	4.9°	1.00	1.00
60°	5.99	2.99	10.19	29.4°	4.7°	1.00	1.00
70°	6.20	2.12	9.81	33.6°	4.3°	1.00	1.00
75°	6.24	1.62	9.54	35.8°	4.0°	1.00	1.00
80°	6.25	1.09	9.22	38.1°	3.7°	1.00	1.00
90°	6.15	0.00	8.44	43.2°	3.2°	1.00	1.00
110°	5.45	1.86	6.45	57.5°	1.9°	1.00	1.00
120°	4.70	2.35	5.33	70.2°	1.3°	1.00	1.00
135°	3.75	2.65	4.11	94.9°	0.7°	1.00	1.00
150°	3.27	2.83	3.38	121.1°	0.5°	1.00	1.00
165°	3.05	2.95	2.95	149.5°	0.3°	1.00	1.00
180°	2.95	2.95	2.84	180.0°	0.1°	1.00	1.00
172.7° (r)	2.99	2.96	2.85	165.0°	0.2°	1.00	1.00

TWS = 8 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.1° (b)	5.99	4.51	12.77	22.7°	12.8°	1.00	1.00
52°	6.77	4.17	12.93	27.1°	13.3°	1.00	1.00
60°	7.09	3.54	12.73	30.8°	12.1°	1.00	1.00
70°	7.27	2.49	12.21	35.8°	9.5°	1.00	1.00
75°	7.30	1.89	11.86	38.4°	8.0°	1.00	1.00
80°	7.29	1.27	11.47	41.2°	6.3°	1.00	1.00
90°	7.20	0.00	10.54	46.9°	4.5°	1.00	1.00
110°	6.46	2.21	8.19	62.2°	2.5°	1.00	1.00
120°	5.87	2.93	6.98	73.3°	1.8°	1.00	1.00
135°	4.85	3.43	5.49	96.4°	1.1°	1.00	1.00
150°	4.32	3.74	4.53	121.5°	0.8°	1.00	1.00
165°	4.06	3.92	3.94	149.5°	0.5°	1.00	1.00
180°	3.94	3.94	3.78	180.0°	0.1°	1.00	1.00
173.8° (r)	3.98	3.95	3.79	167.2°	0.3°	1.00	1.00

TWS = 10 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
40.6° (b)	6.64	5.04	15.04	22.5°	21.8°	1.00	0.93
52°	7.43	4.58	14.93	27.1°	24.8°	1.00	0.99
60°	7.74	3.87	14.64	31.3°	22.9°	1.00	1.00
70°	7.93	2.71	14.09	37.4°	18.1°	1.00	1.00
75°	7.95	2.06	13.74	40.6°	15.5°	1.00	1.00
80°	7.94	1.38	13.33	43.9°	12.8°	1.00	1.00
90°	7.83	0.00	12.35	50.7°	7.4°	1.00	1.00
110°	7.24	2.48	9.88	66.5°	3.2°	1.00	1.00
120°	6.70	3.35	8.56	77.3°	2.3°	1.00	1.00
135°	5.84	4.13	6.89	98.2°	1.5°	1.00	1.00
150°	5.31	4.59	5.71	122.3°	1.1°	1.00	1.00
165°	5.00	4.83	4.99	150.0°	0.7°	1.00	1.00
180°	4.85	4.85	4.80	180.0°	0.2°	1.00	1.00
174.1° (r)	4.89	4.87	4.81	168.0°	0.4°	1.00	1.00

TWS = 12 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
39.0° (b)	6.89	5.35	17.09	22.7°	23.6°	1.00	0.77
52°	7.70	4.74	16.77	28.6°	26.5°	1.00	0.83
60°	8.01	4.00	16.27	32.6°	27.1°	1.00	0.88
70°	8.31	2.84	15.44	37.8°	27.7°	1.00	0.98
75°	8.43	2.18	15.14	41.3°	25.1°	1.00	1.00
80°	8.47	1.47	14.85	45.2°	21.0°	1.00	1.00
90°	8.35	0.00	14.02	53.4°	12.7°	1.00	1.00
110°	7.76	2.65	11.50	70.7°	3.8°	1.00	1.00
120°	7.36	3.68	10.14	81.1°	2.8°	1.00	1.00
135°	6.62	4.68	8.33	100.8°	2.0°	1.00	1.00
150°	6.14	5.32	6.97	123.9°	1.5°	1.00	1.00
165°	5.87	5.67	6.11	150.6°	1.0°	1.00	1.00
180°	5.73	5.73	5.86	180.0°	0.3°	1.00	1.00
175.6° (r)	5.75	5.73	5.86	171.2°	0.5°	1.00	1.00

TWS = 14 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
38.2° (b)	7.06	5.55	19.03	23.0°	25.4°	1.00	0.66
52°	7.87	4.85	18.55	30.1°	27.3°	1.00	0.71
60°	8.18	4.09	17.95	34.4°	28.0°	1.00	0.76
70°	8.50	2.91	17.02	40.0°	28.5°	1.00	0.84
75°	8.65	2.24	16.50	42.9°	28.6°	1.00	0.90
80°	8.79	1.53	15.94	45.9°	28.7°	1.00	0.97
90°	8.87	0.00	15.43	54.9°	19.5°	1.00	1.00
110°	8.19	2.80	13.14	74.2°	4.7°	1.00	1.00
120°	7.83	3.91	11.73	84.8°	3.4°	1.00	1.00
135°	7.29	5.15	9.81	103.3°	2.5°	1.00	1.00
150°	6.88	5.96	8.29	125.5°	1.9°	1.00	1.00
165°	6.61	6.38	7.33	151.5°	1.3°	1.00	1.00
180°	6.46	6.46	7.05	180.0°	0.4°	1.00	1.00
176.1° (r)	6.48	6.47	7.06	172.4°	0.7°	1.00	1.00

TWS = 16 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
37.5° (b)	7.10	5.63	20.62	23.0°	27.9°	0.91	0.60
52°	7.98	4.91	20.27	31.3°	28.1°	1.00	0.61
60°	8.29	4.15	19.59	35.9°	28.7°	1.00	0.65
70°	8.63	2.95	18.58	42.0°	29.1°	1.00	0.73
75°	8.80	2.28	18.01	45.1°	29.3°	1.00	0.78
80°	8.96	1.56	17.41	48.3°	29.3°	1.00	0.85
90°	9.27	0.00	16.29	55.3°	27.9°	1.00	1.00
110°	8.63	2.95	14.77	76.9°	7.1°	1.00	1.00
120°	8.24	4.12	13.34	87.7°	4.2°	1.00	1.00
135°	7.78	5.50	11.34	106.1°	3.1°	1.00	1.00
150°	7.48	6.48	9.71	127.4°	2.3°	1.00	1.00
165°	7.26	7.02	8.63	152.4°	1.6°	1.00	1.00
180°	7.13	7.13	8.31	180.0°	0.5°	1.00	1.00
177.0° (r)	7.15	7.14	8.31	174.5°	0.8°	1.00	1.00

TWS = 20 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
38.3° (b)	7.10	5.57	23.01	24.9°	26.7°	0.46	0.60
52°	7.97	4.90	22.38	32.9°	28.6°	0.49	0.60
60°	8.33	4.17	21.80	37.6°	30.9°	0.62	0.60
70°	8.76	3.00	21.32	44.9°	30.3°	0.87	0.60
75°	8.97	2.32	20.98	48.7°	30.3°	1.00	0.61
80°	9.17	1.59	20.32	52.2°	30.4°	1.00	0.66
90°	9.60	0.00	18.93	59.5°	30.3°	1.00	0.81
110°	9.76	3.34	17.54	79.5°	16.8°	1.00	1.00
120°	9.15	4.57	16.49	91.7°	8.9°	1.00	1.00
135°	8.64	6.11	14.49	110.2°	4.7°	1.00	1.00
150°	8.38	7.26	12.73	130.9°	3.4°	1.00	1.00
165°	8.21	7.93	11.57	154.4°	2.3°	1.00	1.00
180°	8.10	8.10	11.20	180.0°	0.8°	1.00	1.00
177.9° (r)	8.11	8.10	11.20	176.4°	1.1°	1.00	1.00



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Polar Tables							
Boat Name: <b>J/111</b>							
Sail No: <b>Class Sails</b>							
Sail: <b>Asymmetric Spinnaker on CL</b>							
Issued On: <b>2/21/2011 - VPP 2011 1.01</b>							

TWS = 6 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	4.45	2.22	8.95	34.0°	13.8°	1.00	1.00
70°	5.43	1.86	9.20	35.8°	15.3°	1.00	1.00
75°	5.81	1.50	9.19	36.9°	15.6°	1.00	1.00
80°	6.10	1.06	9.08	38.3°	15.9°	1.00	1.00
90°	6.49	0.00	8.64	41.3°	16.1°	1.00	1.00
110°	6.43	2.20	6.97	50.8°	14.6°	1.00	1.00
120°	6.19	3.10	5.96	57.3°	13.0°	1.00	1.00
135°	5.62	3.98	4.36	71.1°	11.6°	1.00	1.00
150°	4.37	3.79	3.03	105.0°	10.7°	1.00	1.00
165°	3.55	3.43	2.68	145.5°	10.2°	1.00	1.00
180°	3.29	3.29	2.66	180.0°	9.9°	1.00	1.00
136.8° (r)	5.47	3.98	4.15	74.2°	11.5°	1.00	1.00

TWS = 8 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	5.76	2.88	11.72	34.0°	17.0°	1.00	1.00
70°	6.73	2.30	11.57	35.5°	24.4°	1.00	1.00
75°	7.03	1.82	11.32	36.8°	26.3°	1.00	0.96
80°	7.26	1.26	11.04	38.7°	26.5°	1.00	0.92
90°	7.57	0.00	10.31	42.8°	26.6°	1.00	0.96
110°	7.63	2.61	8.64	55.3°	17.1°	1.00	1.00
120°	7.53	3.76	7.51	61.6°	15.6°	1.00	1.00
135°	6.85	4.85	5.62	77.2°	12.3°	1.00	1.00
150°	5.70	4.94	4.07	106.7°	11.0°	1.00	1.00
165°	4.69	4.53	3.60	145.8°	10.4°	1.00	1.00
180°	4.38	4.38	3.56	180.0°	10.0°	1.00	1.00
144.8° (r)	6.13	5.01	4.50	94.5°	11.4°	1.00	1.00

TWS = 10 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	6.44	3.22	13.65	33.9°	25.8°	0.98	0.87
70°	7.23	2.47	13.33	37.7°	26.6°	0.94	0.78
75°	7.47	1.93	13.00	39.9°	26.7°	0.91	0.83
80°	7.66	1.33	12.63	42.3°	26.7°	0.91	0.83
90°	7.92	0.00	11.74	47.6°	26.7°	0.93	0.85
110°	8.35	2.86	9.63	58.7°	26.6°	1.00	0.94
120°	8.41	4.21	8.89	67.0°	17.0°	1.00	1.00
135°	7.76	5.49	6.87	83.7°	13.2°	1.00	1.00
150°	6.78	5.87	5.19	110.5°	11.3°	1.00	1.00
165°	5.80	5.61	4.55	146.3°	10.5°	1.00	1.00
180°	5.45	5.45	4.48	180.0°	10.1°	1.00	1.00
146.6° (r)	7.08	5.91	5.49	102.6°	11.6°	1.00	1.00

TWS = 12 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	6.82	3.41	15.45	35.4°	26.3°	0.87	0.82
70°	7.51	2.57	14.97	40.1°	26.7°	0.84	0.77
75°	7.73	2.00	14.56	42.7°	26.7°	0.81	0.84
80°	7.90	1.37	14.12	45.5°	26.7°	0.82	0.85
90°	8.13	0.00	13.07	51.6°	26.7°	0.82	0.90
110°	8.86	3.03	10.95	63.6°	26.7°	0.96	0.86
120°	9.11	4.55	9.81	70.8°	24.7°	1.00	1.00
135°	8.43	5.96	8.12	89.8°	14.8°	1.00	1.00
150°	7.56	6.54	6.44	115.3°	11.7°	1.00	1.00
165°	6.71	6.48	5.67	147.7°	10.7°	1.00	1.00
180°	6.35	6.35	5.56	180.0°	10.2°	1.00	1.00
154.8° (r)	7.27	6.57	6.08	125.2°	11.3°	1.00	1.00

TWS = 14 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	7.07	3.53	17.15	36.9°	26.5°	0.78	0.80
70°	7.70	2.63	16.53	42.3°	26.6°	0.75	0.80
75°	7.90	2.05	16.10	45.3°	26.7°	0.76	0.81
80°	8.05	1.40	15.57	48.4°	26.7°	0.75	0.86
90°	8.33	0.00	14.46	54.8°	26.7°	0.74	0.92
110°	9.26	3.17	12.20	67.5°	26.7°	0.85	0.99
120°	9.49	4.75	10.86	75.6°	26.7°	0.94	1.00
135°	9.11	6.44	9.45	94.2°	15.8°	1.00	1.00
150°	8.14	7.05	7.82	119.8°	12.0°	1.00	1.00
165°	7.46	7.21	6.92	149.3°	10.9°	1.00	1.00
180°	7.15	7.15	6.74	180.0°	10.3°	1.00	1.00
164.4° (r)	7.48	7.21	6.94	148.2°	11.0°	1.00	1.00

TWS = 16 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	7.24	3.62	18.82	38.3°	26.6°	0.72	0.76
70°	7.83	2.68	18.06	44.2°	26.6°	0.68	0.84
75°	8.01	2.07	17.57	47.4°	26.7°	0.69	0.85
80°	8.16	1.42	17.00	50.8°	26.7°	0.68	0.89
90°	8.55	0.00	15.90	57.5°	26.7°	0.69	0.91
110°	9.57	3.27	13.50	71.1°	26.7°	0.79	1.00
120°	9.88	4.94	12.11	79.7°	26.7°	0.88	1.00
135°	9.95	7.04	10.77	96.6°	16.8°	1.00	1.00
150°	8.70	7.54	9.24	123.0°	12.4°	1.00	1.00
165°	8.04	7.77	8.33	151.1°	11.1°	1.00	1.00
180°	7.77	7.77	8.11	180.0°	10.4°	1.00	1.00
172.0° (r)	7.86	7.78	8.16	164.6°	10.8°	1.00	1.00

TWS = 20 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	7.40	3.70	22.06	40.8°	26.6°	0.64	0.71
70°	7.94	2.72	21.17	47.5°	26.8°	0.64	0.71
75°	8.11	2.10	20.59	51.1°	26.8°	0.64	0.71
80°	8.31	1.44	20.01	54.8°	26.8°	0.64	0.71
90°	9.01	0.00	18.90	61.5°	26.7°	0.64	0.82
110°	10.11	3.46	16.18	76.8°	26.7°	0.70	1.00
120°	10.68	5.34	14.73	85.4°	26.7°	0.78	1.00
135°	11.93	8.43	12.45	98.6°	26.7°	0.97	1.00
150°	10.10	8.75	11.92	126.3°	14.1°	1.00	1.00
165°	9.14	8.83	11.22	153.4°	11.6°	1.00	1.00
180°	8.82	8.82	11.02	180.0°	10.6°	1.00	1.00
138.9° (r)	11.94	8.99	12.44	103.5°	21.0°	1.00	1.00